

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 86. (Canceled).

Claim 87. (Currently Amended) A data conversion apparatus comprising:

reception means for receiving first data;

identifying means for identifying one PPP frame of said first data in a lower layer than PPP;

data conversion means for converting said first data into second data based on the identified one PPP frame; and

transmission means for transmitting said second data,

wherein said first data is data having a PPP frame configuration, or a frame configuration flag-deleted from a PPP frame configuration, and being not octet-inserted and not bit-inserted, and

said second data is data having a PPP frame configuration and being octet-inserted or bit-inserted.

Claim 88. (Currently Amended) A data conversion apparatus comprising:

reception means for receiving first data;

identifying means for identifying one PPP frame of said first data in a lower layer than PPP;

data conversion means for converting said first data into second data based on the identified one PPP frame; and

transmission means for transmitting said second data,

wherein said first data is data having a PPP frame configuration, or a frame configuration flag-deleted from a PPP frame configuration, and being not octet-inserted and not bit-inserted, and

said second data is data having a frame configuration of data link layer protocol other than PPP.

Claim 89. (Previously Presented) A data conversion method in a third communication apparatus located between a first communication apparatus and a second communication apparatus performing data communication with the first communication apparatus based on PPP, the data conversion method comprising:

a reception step for receiving first data from the first communication apparatus;

a data conversion step for converting said first data into second data; and

a transmission step for transmitting said second data toward the second communication apparatus,

wherein said first data is data being not octet-inserted and not bit-inserted, and said second data is data being octet-inserted or bit-inserted, or data having a frame configuration of data link layer protocol other than PPP, or said first data is data being octet-inserted or bit-

inserted, or data having a frame configuration of data link layer protocol other than PPP, and said second data is data being not octet-inserted and not bit-inserted, and

said data being not octet-inserted and not bit-inserted has a frame configuration in which additional information including information for identifying frame partition is added to a PPP frame configuration, or a frame configuration in which additional information including information for identifying frame partition is added to a frame configuration flag-deleted from a PPP frame configuration, and

said information for identifying is frame length.

Claim 90. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step comprises:

a deletion step for performing octet deletion or bit deletion to data having a PPP frame configuration and being octet-inserted or bit-inserted; and

an additional information addition step for adding additional information including information for identifying a frame partition to the data octet-deleted or bit-deleted by said deletion step.

Claim 91. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step comprises:

a flag deletion step for deleting a flag from data having a PPP frame configuration and being octet-inserted or bit-inserted;

a deletion step for performing octet deletion or bit deletion to the data flag-deleted by said flag deletion step; and

an additional information addition step for adding additional information including information for identifying a frame partition to the data octet-deleted or bit-deleted by said deletion step.

Claim 92. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step comprises:

an additional information deletion step for deleting additional information from data having a frame configuration in which said additional information including information for identifying a frame partition is added to a PPP frame configuration and being not octet-inserted and not bit-inserted; and

an insertion step for performing octet insertion or bit insertion to the data deleted of additional information by said additional information deletion step.

Claim 93. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step comprises:

an additional information deletion step for deleting additional information from data having a frame configuration in which said additional information including information for identifying frame partition is added to a frame configuration flag-deleted from a PPP frame configuration and being not octet-inserted and not bit-inserted;

an insertion step for performing octet insertion or bit insertion to the data additional information-deleted by said additional information deletion step; and

a flag addition step for adding a flag to the data octet-inserted or bit-inserted by said insertion step.

Claim 94. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step converts data having a frame configuration in which additional information including information for identifying a frame partition is added to a PPP frame configuration and being not octet-inserted and not bit-inserted into data having a frame configuration of data link layer protocol other than PPP.

Claim 95. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step converts data having a frame configuration in which additional information including information for identifying frame partition is added to a frame configuration flag-deleted from a PPP frame configuration and being not octet-inserted and not bit-inserted into data having a frame configuration of data link layer protocol other than PPP.

Claim 96. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step converts data having a frame configuration of data link layer protocol other than a PPP into data having a frame configuration in which additional information including information for identifying frame partition is added to a PPP frame configuration and being not octet-inserted and not bit-inserted.

Claim 97. (Previously Presented) The data conversion method as claimed in claim 89, wherein said data conversion step converts data having a frame configuration of data link layer protocol other than a PPP into data having a frame configuration flag-deleted from a

PPP frame configuration to which additional information including information for identifying frame partition is added and being not octet-inserted and not bit-inserted.

Claims 98-104. (Cancelled).